Conclusions: Sensitive to the number of cycles of bevacizumab, its unit cost, and the utility in stable effectiveness ratios (ICERs) were US$309,000/life-year gained and US$557,000/QALY mental lifetime cost of US$71,000 per patient. The projected incremental cost-effectiveness thresholds, bevacizumab is not projected to be cost-effective for these trial patients from a payer perspective (but without accounting for any possible price assurance). A sensitivity analysis from the societal perspective could generate different results. These findings might help decision-makers to make informed decisions about resource allocation for advanced NSCLC care.

Advanced non-small cell lung cancer (NSCLC) Cetuximab treatment decision model: Chemotherapy+cetuximab vs. cetuximab treat-to-rash strategy vs. chemotherapy only in first-line treatment of stage IIIbIV NSCLC

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Objectives: To model the cost-utility of two treatment strategies utilizing cetuximab plus platinum-doublet chemotherapy as first-line treatment in Stage IIIbIV NSCLC, non-small cell lung cancer relative to chemotherapy only from a societal perspective. Methods: A decision analytic model was developed to estimate direct medical costs, patient time costs, and quality-adjusted life-years (QALYs) for three treatment strategies: 1) chemotherapy+cetuximab for all patients; 2) chemotherapy+cetuximab for one month and continued for patients experiencing rash; and 3) chemotherapy only. Model parameters were derived from the pivotal trial of cetuximab, published literature, and government sources. The model included trial-based adverse events and costs related to drug treatment, routine follow-up, AEs, and post-progression care. The model results were examined using one-way and probabilistic sensitivity analyses (PSA). Results: Total QALYs for the chemotherapy+cetuximab for all, treat-to-rash, and chemotherapy only strategies were 0.608, 0.610, and 0.577, respectively. Total costs were US$173,532, US$154,174, and US$101,164, respectively. Relative to chemotherapy only, chemotherapy+cetuximab and treat-to-rash strategies had incremental cost-effectiveness ratios of $2,219,000 and $1,470,000 per QALY, respectively. Relative to chemotherapy+cetuximab for all, the treat-to-rash strategy had a cost-savings of $21,358, and a small increase in QALYs. One-way sensitivity analyses found results to be sensitive to the cost and required dose of cetuximab, cost of care after progression, and progression-free and overall survival. In the PSA, chemotherapy only had the highest probability of being cost effective until a willingness-to-pay of US$1,400,000 after which treat-to-rash had the highest probability. Conclusions: These results suggest that the addition of cetuximab to chemotherapy for this patient population is not a cost-effective alternative to chemotherapy only by any plausible standard of willingness-to-pay. Sensitivity analysis showed that the model is robust to adverse events and costs related to drug treatment, routine follow-up, AEs, and post-progression care. In the chronic phase of the disease, dasatinib yielded 6.33 and 6.03 QALYs for Colombia and Venezuela, respectively, in comparison with 6.03 and 5.73 QALYs in the case of nilotinib. In Colombia, with an ICER of US$54,120,910 per QALY, stated in 2009 Colombian pesos, dasatinib showed a better cost-effectiveness ratio than nilotinib, and in Venezuela, dasatinib proved to be dominant. In the accelerated phase, dasatinib produced 3.5 times more QALYs than those of the imatinib group in both countries. In the blastic phase, QALYs were 3.4 times more than those of the imatinib group. Conclusions: Dasatinib at a dose of 140 mg/day showed a better cost-effectiveness ratio than the doses of 800 mg of Imatinib and 800 mg of Nilotinib for the treatment of patients with CML resistant to usual imatinib doses in the chronic phase, as well as in the accelerated and blastic phases.

Cost-effectiveness of adjuvant therapy with trastuzumab in the treatment of early breast cancer (EBC) in Romania

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Objectives: To perform an economic evaluation of Dasatinib for the treatment of Chronic Myelogenous Leukaemia (CML) in patients resistant to imatinib in Colombia and Venezuela, using data from the study entitled “An Economic Evaluation of Dasatinib for the treatment of Chronic Myelogenous Leukaemia in Imatinib—Resistant Patients”, which was carried out by the York consortium, UK. Methods: On the same initial assumptions of the York work as regards to population, age at start, time horizon and discount rate, and adjusting the rates of mortality due to other causes, we used a Markov model which would enable a prediction of costs and health benefits obtained during the entire lifetime for each of the treatment options. Results: In the chronic phase of the disease, dasatinib yielded 6.33 and 6.03 QALYs for Colombia and Venezuela, respectively, in comparison with 6.03 and 5.73 QALYs in the case of nilotinib. In Colombia, with an ICER of US$54,120,910 per QALY, stated in 2009 Colombian pesos, dasatinib showed a better cost-effectiveness ratio than nilotinib, and in Venezuela, dasatinib proved to be dominant. In the accelerated phase, dasatinib produced 3.5 times more QALYs than those of the imatinib group in both countries. In the blastic phase, QALYs were 3.4 times more than those of the imatinib group. Conclusions: Dasatinib at a dose of 140 mg/day showed a better cost-effectiveness ratio than the doses of 800 mg of Imatinib and 800 mg of Nilotinib for the treatment of patients with CML resistant to usual imatinib doses in the chronic phase, as well as in the accelerated and blastic phases.

Similarities and differences in treatment patterns and resource utilisation for multiple myeloma: A comparison between 4 Nordic countries

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Objectives: Compare Multiple Myeloma (MM) treatment patterns and resource consumption in the Nordic countries. Methods: A modified Delphi panel was designed, consisting of 14 haematologists at different university hospital clinics in Norway, Denmark, Finland, and Sweden. In a 3-round process with structured questionnaires in February 2007 to January 2008, resources utilisation was surveyed including drugs, tests, bone marrow transplantations (BMT), hospital inpatient stay/visits, radiotherapy, surgical- and diagnostic procedures. Results: Patient characteristics were slightly different with mean age ranging from 67 to 70, age above 65 years 52%-64%; males 55%-64%; co-morbidities 47%-63%. Differences were found in the time spent in 1st line treatment (Norway 18 months; Finland 7 months) and the share of patients continuing on to 2nd and 3rd lines (Norway 38% and 22%; Finland 89% and 72%, respectively). Melphalan and prednisone combination in 1st line was used in all countries. Differences in the introduction of thalidomide, bortezomib and lenalidomide were seen, with Denmark treating 24% of the patients with bortezomib and lenalidomide in 1st line. This could be driven by differences in the number of visits. Radiotherapy was highest in Sweden and Denmark. Small differences were seen in other resource categories. Conclusions: Although Nordic treatment guidelines for MM from 2005 are well accepted (excl. Finland) some differences in treatment patterns and resource utilisation in patients with multiple myeloma in clinical studies (1%-40%). The prescription rate of blood enhancement drugs and BMT was highest in Sweden. The number of hospitalisation-days per patient-month ranged between 0.4 (Denmark) to 1.4 (Finland) in 1st line but increased with line of treatment in all countries. Denmark on the other hand had more outpatient visits. Radiotherapy was highest in Sweden and Denmark. Small differences were seen in other resource categories. Conclusions: Although Nordic treatment guidelines for MM from 2005 are well accepted (excl. Finland) some differences in treatment patterns and resource utilisation seen in patients with multiple myeloma in clinical studies and a non-synchronised development of new treatment guidelines. Also differences in political decisions, relative prices and health care organisations may have an impact.